Mr. Joshua Lederberg Osborn Botanical Laboratory Yale University New Haven, Conn.

Dear Mr. Lederberg:

I was very glad to receive your interesting letter and to hear about the new evidence for sexual phase in E. Coli. I should certainly appreciate having a note from you once in a while keeping me to date on your latest discoveries.

Do you remember the arrangement I made with Dr. Dienes at C.S.H.? He promised to send me his data so that I can try to find out whether the "mating types" in his bacteria follow a breeding system comparable to any other system known in lower organisms. I sent him a reminder after I returned to Bloomington but have heard nothing further from him. Do you know whether anyone has seen his data?

The questions you raise about the differentiation of mating types in Paramecium bursaria is easy to answer. I have seen no paper on this since Jennings' paper of 1942. There is, of course, a superficial resemblance to the problem of phase variation as Kimball suggests. How deep the analogy goes, however, I cannot even guess because I lack the detailed knowledge of the situation in bacteria on which to base a sound judgment.

So far as the serological aspects of mating types are concerned, you now have at Yale a man who knows as much about this as anyone, and I strongly urge you to get in touch with him. This is Dr. C. B. Metz who spent last year here as a National Research Fellow and who is starting in now as an Instructor in the Osborn Zoological Laboratory. I think you will find he has some very interesting things to tell you.

Cordially yours,

T. M. Sonneborn